PENTAMETHYLMELAMINE HYDROCHLORIDE

NSC - 118742

Chemical Name: N,N,N',N',N''-Pentamethylmelamine,

monohydrochloride

CAS Registry Number: 35832-09-8

Molecular Formula: C₈H₁₆N₆·HCl M.W.: 232.7

Approximate Solubility: (as free base)

Solvent	Heat	Solubility (mg/mL)
0.1 N HCl	none; moderate	≈ 15 - 20
H_2O	strong	≈ 3.6
MeOH	moderate	> 150
95% EtOH	moderate	> 200
CHCl ₃	none	> 200
DMSO	none	> 100

Stability:

Bulk:

A sample stored at $60~^{\circ}$ C for 30~days showed no decomposition (TLC).

Solution:

A 2% solution in water (pH = 2.9), showed no decomposition after 7 days at room temperature (TLC).

Ultraviolet Absorption:

(0.1 N HCl)

 $\lambda_{\text{max}} = 237 \pm 2 \text{ nm}$

 $\varepsilon = 26,200 - 27,100$

High Performance Liquid Chromatography:

Column:

30 cm x 4.0 mm i.d. Spherisorb ODS

Mobile Phase:

MeOH/H₂O/Et₂NH, 600/400/0.5

Flow Rate:

1.0 mL/min

Detection:

UV at 254 nm

Sample Preparation:

1 mg samplings are accurately weighed and each dissolved in 1.00 mL H_2O . One mL of internal standard solution is added and aliquots (1.5 μ L) of the resulting solutions are injected.

resulting solutions are injected.

Internal Standard: o-nitroaniline diluted to (2.4 mg/10 mL

methanol)

Retention Volume: 6.5 mL (NSC - 118742)

4.5 mL (I.S.)